

JC17 Rec'd PCT/PTO 29 APR 2005

AMENDMENTS TO THE CLAIMS

1 (currently amended): A metal injection molding material which ~~contains~~comprises

- a) from 40 to 70% by volume of metal powder, including at least 50% by weight, based on the total amount of metal, of an iron-containing powder, at least 90% by weight, based on the amount of this iron-containing powder, of the particles of which have an effective diameter of at least 40 micrometers,
- b) from 30 to 60% by volume of a thermoplastic binder and
- c) from 0 to 5% by volume of a dispersant and/or optionally also other assistants wherein the total amount of the metal powder comprised comprises at least 90% by weight of iron.

2 (original): A metal injection molding material as claimed in claim 1, wherein at least 90% by weight, based on the amount of the iron-containing powder, of the particles of the iron-containing powder have an effective diameter of at least 50 micrometers.

3 (original): A metal injection molding material as claimed in claim 2, wherein at least 90% by weight, based on the amount of the iron-containing powder, of the particles of this iron-containing powder have an effective diameter of at least 60 micrometers.

4 (canceled): A metal injection molding material as claimed in claim 1, wherein the total amount of the metal powder contained comprises at least 90% by weight of iron.

5 (original): A metal injection molding material as claimed in claim 1, wherein the thermoplastic binder consists of a mixture of from 50 to 100% by weight of a polyoxymethylene homo- or copolymer and from 0 to 50% by weight of a polymer

which is immiscible with the polyoxymethylene homo- or copolymer and can be removed thermally without a residue, or of a mixture of such polymers.

6 (currently amended): A metal injection molding process, wherein a metal injection molding material which contains

- a) from 40 to 70% by volume of metal powder, including at least 50% by weight, based on the total amount of metal, of an iron-containing powder, at least 90% by weight, based on the amount of this iron-containing powder, of the particles of which have an effective diameter of at least 40 micrometers,
- b) from 30 to 60% by volume of a thermoplastic binder and
- c) from 0 to 5% by volume of a dispersant and/or optionally also other assistants, at least 90% by weight of the total amount of the metal powder containing being iron, is shaped by injection molding, the injection molded parts are freed from the binder and said parts freed from the binder are sintered.